Appl. No. 10/566,759 Response to Office Action of January 5, 2007

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

- 1. (currently amended) An interconnect (21) in a series of interconnects of a garment, the interconnect comprising:
- a first portion (22) eemprising including a magnet (30) with a first magnetic direction and means for forming an electrical connection; and
- a second portion (23) comprising means for forming an electrical connection when coupled with the first portion,
- wherein the first (22) and second (23) portions form a mechanical connection and an electrical connection when connected, the garment further including:
- a sensor for sensing a coupling of the interconnect in the series of interconnects; and
- an attachable device, wherein the attachable device is adapted to be controlled in response to a number of coupled or uncoupled interconnects in the series of interconnects sensed by the sensor.
- 2. (currently amended) The interconnect (21) of Claim 1, wherein the first portion (22) and second (23) portion form [[a]] the mechanical connection using magnetic attraction generated by the magnet (30).
- 3. (original) The interconnect (21) of Claim 1, wherein the second portion (23) further comprises a magnet (41) with a second magnetic direction.
- 4. (original) The interconnect (21) of Claim 2, wherein the electrical connection is aligned by the mechanical connection.

PATENT Docket No. US030262US2 Customer No. 000024737

- 5. (withdrawn) The interconnect (21) of Claim 4, wherein the electrical connection is aligned by the mechanical connection and a physical feature (71, 72) of the first (22) and/or second (23) portions.
- 6. (withdrawn) The interconnect (21) of Claim 1, wherein the first (22) and second (23) portions comprise means for mechanically connecting fabric materials.
- 7. (withdrawn) The interconnect (21) of Claim 6, wherein the first (22) and second (23) portions receive electric current from a current supply source (4) via fabric conductors (3) contained within the fabric materials.
- 8. (withdrawn) The interconnect (21) of Claim 7, wherein the first (22) and second (23) portions form an electrical circuit when mechanically connected.
- 9. (withdrawn) The interconnect (21) of Claim 8, wherein the electrical circuit passes current from one location on a fabric material to another location on a fabric material.
- 10. (withdrawn) The interconnect (21) of Claim 8, wherein the electrical circuit passes electrical signals from one location on a fabric material to a device.
- 11. (withdrawn) The interconnect (21) of Claim 1, wherein the means for forming an electrical connection comprises a male connector (61) or a female receptor (62).
- 12. (withdrawn) The interconnect (21) of Claim 1, wherein the means for forming an electrical connection comprises a surface contact (51).
- 13. (original) The interconnect (21) of Claim 1, wherein the means for forming an electrical connection of the first (22) or second (23) portion comprises the magnet (30).

- 14. (currently amended) An interconnect (21) in a series of interconnects of a garment, the interconnect comprising:
- a first portion (22) eemprising including an electromagnet (30) and means for forming an electrical connection:
 - a means (4) for supplying current to the electromagnet (30); and
- a second portion (23) comprising means for forming an electrical connection when coupled with the first portion (22).
- wherein the first (22) and second (23) portions form a mechanical connection upon the electromagnet (30) receiving current and further form an electrical connection when mechanically connected, the garment further including:
- a sensor for sensing a coupling of the interconnect in the series of interconnects; and
- an attachable device, wherein the attachable device is adapted to be controlled in response to a number of coupled or uncoupled interconnects in the series of interconnects sensed by the sensor.
- 15. (original) The interconnect (21) of Claim 14, wherein the means for supplying current (4) further comprises an electronic device (7).
- 16. (original) The interconnect (21) of Claim 15, wherein the electronic device (7) is a wearable electronic device.
- 17. (original) The interconnect (21) of Claim 14, wherein the second portion (23) further comprises a magnet (41).
- 18. (original) The interconnect (21) of Claim 17, wherein the magnet (41) is an electromagnet.

PATENT Docket No. US030262US2 Customer No. 000024737

- 19. (currently amended) The interconnect (21) of Claim 14, wherein the second portion (23) comprises a substance capable of being attracted by a magnet.
- 20. (withdrawn) A method of controlling a device (7) comprising:

coupling at least one interconnect (21) in a series of interconnects (21), each comprising a first portion (22) comprising a magnet (30) with a first magnetic direction and means for forming an electrical connection, and a second portion (23) comprising means for forming an electrical connection when coupled with the first portion (22), wherein the first (22) and second (23) portions form a mechanical connection and an electrical connection when connected;

sensing the coupling of the at least one interconnect (21);

controlling the device (7) based upon the number of coupled or uncoupled interconnects (21) in the series of interconnects (21).

- 21. (withdrawn) The method of Claim 20, wherein the sensing step further comprises sensing when an electrical circuit is formed by the coupling step.
- 22. (withdrawn) The method of Claim 21, wherein the controlling step further comprises incrementally controlling the device (7) based upon the number of coupled or uncoupled interconnects (21).
- 23. (withdrawn) The method of Claim 21, wherein the device (7) is a heating element contained in a garment (20), and the at least one interconnect (21) is attached to the garment (20).

24. (currently amended) A garment (20) comprising:

[[an]] a series of interconnects, each interconnect comprising:

a first portion (22) eemprising including a magnet (30) with a first magnetic direction and means for forming an electrical connection; and

a second portion (23) comprising means for forming an electrical connection when coupled with the first portion,

wherein the first (22) and second (23) portions form a mechanical connection and an electrical connection when connected, the garment further comprising:

a sensor for sensing a coupling of each interconnect in the series of interconnects; and

an attachable device, wherein the attachable device is adapted to be controlled in response to a number of coupled or uncoupled interconnects in the series of interconnects sensed by the sensor.